

PLEASE CLICK ON THE COUNTY (OR DEPARTMENT'S) SEAL  
TO RETURN TO THIS PAGE

[CLICK ON HERE FOR THE CEO'S MEMO DATED AUGUST 1, 2014](#)

[CLICK ON HERE FOR THE CEO'S MEMO DATED OCTOBER 31, 2014](#)



County of Los Angeles  
**CHIEF EXECUTIVE OFFICE**

Kenneth Hahn Hall of Administration  
500 West Temple Street, Room 713, Los Angeles, California 90012  
(213) 974-1101  
<http://ceo.lacounty.gov>

WILLIAM T FUJIOKA  
Chief Executive Officer

August 1, 2014

To: Supervisor Don Knabe, Chairman  
Supervisor Gloria Molina  
Supervisor Mark Ridley-Thomas  
Supervisor Zev Yaroslavsky  
Supervisor Michael D. Antonovich

From: William T Fujioka  
Chief Executive Officer

A handwritten signature in black ink, appearing to read "WTF", is written over the printed name of William T. Fujioka.

Board of Supervisors  
GLORIA MOLINA  
First District

MARK RIDLEY-THOMAS  
Second District

ZEV YAROSLAVSKY  
Third District

DON KNABE  
Fourth District

MICHAEL D. ANTONOVICH  
Fifth District

**WORK PLAN SUMMARY FROM AECOM, INC. FOR THE PROPOSED  
CONSOLIDATED CORRECTIONAL TREATMENT FACILITY (ITEM NO. 24, AGENDA  
OF AUGUST 5, 2014 - CONTINUED FROM AGENDA OF JULY 29, 2014)**

Item No. 24 on the August 5, 2014 Board agenda, recommends actions needed to carry out Supervisors Molina and Antonovich's May 6, 2014 motion to further refine and develop performance criteria and initial design of Vanir Construction Management's Option 1B, which proposed design and construction of a Consolidated Correctional Treatment Center (CCTF). The CCTF will focus on integrating mental health and substance abuse treatment programs to County inmates in a correctional setting.

We are enclosing AECOM Inc.'s work plan summary for informational purposes. The work plan articulates the detailed tasks needed to refine and further develop the CCTF.

If you have any questions regarding this matter, please contact Santos H. Kreimann at (213) 974-1186.

WTF:SHK:DJT  
TJ:rp

Attachment

c: Sheriff  
Executive Office, Board of Supervisors  
County Counsel  
Board Justice Deputies  
Health Services  
Mental Health  
Public Health  
Public Works

*"To Enrich Lives Through Effective And Caring Service"*

***Please Conserve Paper – This Document and Copies are Two-Sided  
Intra-County Correspondence Sent Electronically Only***

## WORK PLAN SUMMARY Revised 30 July 2014

### *Introduction*

AECOM's approach to developing the scoping documents for the new Los Angeles County Consolidated Correctional Treatment Facility (CCTF) entails the validation and refinement of the architectural program that was developed by Vanir under Option 1B, which was approved by the Board of Supervisors on May 6, 2014. Option 1B focuses on the integration of mental health and substance abuse treatment programs and custody operations in a flexible and cohesive space program. As further directed by the Board, refinement of this program will explore opportunities to incorporate efficiencies in facility design, operations, and project delivery with the intent to enhance the overall feasibility of Option 1B.

Accordingly, AECOM will employ "best practices" for the design of treatment environments that house inmates with mental health disorders, minimize capital and life cycle costs, development, design, and construction of phases, and operational disruptions, and enhance the overall development of the site. The result of this review will lead to the development of scoping documents for the various packages envisioned for this important County capital project.

A key asset of the AECOM team is our understanding of the operations, particularly how treating mental health individuals in a correctional setting, will lead to the development of a functional facility responsive to the needs of the inmates, the staff and the public. Los Angeles County based, JFA Inc., represented by Jay Farbstein and Brenda Epperly will augment our team by providing "evidence based practices" that have been shown to be practical and effective in the design of facilities that require unique operational and design parameters. The outcome of this project is to develop a facility that ensures adequate mental health treatment, suicide prevention and effective and humane conditions of confinement for inmates. Another important goal is to improve the employment conditions for the staff and health care workers treating the inmates.

Our Approach/Methodology for refining the Vanir Report and developing the Scoping Documents for the CCTF will also include an analysis of several key conceptual components, including:

1. Potential location of new CCTF and other facilities on the existing site
2. Parking requirements
3. Arraignment Court requirements
4. Demolition requirements and sequencing
5. Site circulation
6. transportation requirements
7. Central Plant and other support facility requirements
8. Coordination with EIR

The five phases for each for the project components consist of the following:

- Phase I – Project Orientation/Organization
- Phase II – Survey, Inventory, Data Analysis

- Phase III – Definition and Evaluation of Building Development
- Phase IV – Recommended Building Plans
- Phase V – Design/Builder Procurement Scoping Document Services

This approach assumes multiple design/build contracts. There are nine specific tasks and five phases for the development of each. All tasks may not lend themselves well to each of the phases. As an approach example, the loop road does not readily lend itself to survey or inventory, the intent is to be able to establish enough definition so that the design builder can develop the road in the approximate location identified. This is similar for the central plant in terms of potential connections, routings and capacities. Our intent is not to design but to provide enough guidelines so that the proposers know what *they* have to design.

Following are the required Phases and a brief overview of each:

#### **Phase I – Project Orientation/Organization**

This phase will focus on collecting and refining previous studies prepared by Vanir and others retained by the County, current issues, facility site and building plans. Vanir will be actively involved in this phase of work. Additionally, during this phase we will work together to better understand your philosophical approach and vision for operating the Consolidated Correctional Treatment Facility site and your expectations regarding the output of the planning effort. This phase will result in a refined work plan that reflects joint input into the process.

#### **Phase II – Survey, Inventory and Data Analysis**

This will include preparation of base maps and plans with regard to collection of base data for planning of alternative site plans and building configurations consistent with Option 1B. Additionally, during this phase, planning will be accomplished so as to allow each facility to be modeled relative to current and potential supportable capacity in accordance with Title 24 Standards and LA County's programmatic goals. This phase will also include the option to develop the ALTA survey described in the County issued scope of work. Phase II culminates with the preparation and submission of an existing condition report which will serve as the database for planning.

#### **Phase III – Definition & Evaluation of Alternatives**

This stage will focus on the cursory evaluation of the existing specified structures designated for temporary only re-use or re-assignment for a defined interim period.

The decision to demolish the Men's Central Jail has already been made. Portions may need to remain open on a temporary basis depending on alternate phasing. No portion of Men's Central Jail will need to remain functioning for any period of time beyond initial construction completion. The criteria for temporarily reusing existing facilities during construction are as follows:

- Security/Code Related/Life Safety

- Deferred Maintenance
- Enhanced Custodial Services
- Reduced Operational Costs
- Maintain Current Possible Capacity, or
- Provide for Future Potential Growth and Increased Capacity
- Inclusion of both Facility level and Complex Level

#### **Phase IV – Recommended Building Plans**

This phase of the planning approach focuses on the synthesis of the recommended plans for each of the areas, facility and site layouts into a prioritized approach to implement improvements on a facility by facility, structure by structure, area by area on a site wide basis. The final site plan evaluation will provide an overall framework for the orderly development of all structures, facilities and physical areas on the site slated for development to meet the goals and objectives of Los Angeles County. The site development plans will be explored and analyzed so as to ascertain the best and most practical future for the functioning of the Consolidated Correctional Treatment Facility. Vanir's initial programmatic study will serve as the basis for this examination. We will hold additional program discussions with the departments of Mental Health, Public Health, Health Services, and Sheriff to refine Vanir's initial program model and ensure focus on the programmatic objectives is maintained.

As part of this exercise, operational costs will also be refined. Where appropriate this will be extended to a life-cycle cost/benefit analysis as an additional resource for final decision-making. A major component of life cycle costing is based on the staffing of the facility. As much of staffing is predicated on housing unit sizes and layouts, we would look to the expertise of the Sheriff's Department to work with us in providing input, expertise and guidance as to the interaction of housing unit and cluster shapes and sizes. All staffing and projected staffing will be provided by the Sheriff's Department. It is NOT the intent of this report to develop any staffing patterns.

Although it is not our intent to calculate actual electric, water and sewage future usage, we will be developing an order of magnitude projection so as to establish future capacity and demand

These decisions may also yield cost implications that will require consideration. Phase IV will include a series of final graphics and narrative draft report depicting development options with permutations and combinations related to cost and scheduling depending upon the extent of required temporary reallocation, if any and/or new construction. The intent is to develop advanced stacking and blocking diagrams depicting what uses will occur as developed from the program, and where within the proposed buildings those functions will occur.

#### **Phase V – Design / Builder Procurement Scoping Document Services**

The intent of this work effort is to develop and document enough information, based on the previous phases, for the short-listed design-build teams to propose actual building solutions along with actual proposed costs and schedules. This will not include specific floor plans but will include enough information so that each team will be able to provide a solution that will be consistent with the project's

intent as well as consistent with each of the other competitor's proposal. A final draft report will be developed for presentation to be reviewed by the Project Review Committee. This will represent a culmination of all of the previous phases. Upon receipt of all comments a final report for this phase will be issued, and a stand-alone Executive Summary will be prepared for broader distribution by LADPW.

All of the work being produced, unless otherwise noted, will be performed on a lump sum, percentage of completion by phase basis. Although the final document will contain diagrams and drawings supporting the work, actual architectural and engineering drawings will not be produced. The work effort included in this proposal will mirror the work effort and deliverables of similar sized and natured correctional/mental and physical health facilities of similar cost magnitude. Further, the scope of deliverables shall follow the County Design Build Manual.

## **DETAILED SCOPE NARRATIVE**

### *Methodology*

The following work plan depicts the major tasks to be undertaken within each phase of the project in an effort to meet the Correctional mental health goals and objectives of LA County.

#### **Phase I – Project Orientation/Organization**

The purpose of this Phase is to effectively organize our efforts and integrate the County's input to refine the Project Work Plan and Schedule, develop a data base management system, and obtain agreement on the approach, methods, and work products of the Project.

This stage will be of short duration but of crucial importance to the Study as it guides what is to actually occur. In essence, in order to work the plan, one must plan the work. That occurs during this phase. Phase I is divided into four major tasks:

- I.1 Establish Project Orientation
- I.2 Establish Project Organization
- I.3 Examine Existing Data (Vanir Report and other reports by County retained consultants)
- I.4 Submit Interim Report

**Task I.1 – Project Orientation** – The primary purpose of this task is to develop the philosophical and operational underpinnings of all inventory assessment, programming and scoping document work for the project. This will involve discussions and work sessions with LADPW, LASD, LA County Department of Mental Health, LA County Department of Public Health and LA County Department of Health Services along with necessary required equipment operators to outline a Mission Statement for the project, and to subsequently round this out with an understanding and description of the specific goals to be addressed by the development of this facility. Additionally, the number of program and planning committees will be established along with the proposed members for each of those committees. Stakeholders and regulatory agencies will

be identified and assigned committees as well. Committees may consist of active program related committees addressing issues such as food service, or their specific tasks may involve oversight of other committee's work such as a steering committee or a judicial interface group. Once established, a kickoff meeting will be held and the work can commence.

**Task 1.2 – Project Organization** – Collaterally, it is important to establish a good working relationship between key members of the Consultant Team and the Client. This relationship is essential to ensure that initial direction is given, concerns are resolved, the Project is organized efficiently, and a sound basis is established for communication and confidence between the Team and the County. Critical to the success of the project is implementing an approach to consensus building at the outset of the project. As part of Task 1.2, we will establish a Project Review Committee that will help guide the effort and participate in all phases of the project.

The work plan outlined in the following pages is intended to identify an approach and methodology that meets all the criteria established in the Request for Proposals for Consultant Services. This task provides an opportunity for LADPW, DMH, DPH, DHS, and LASD to refine the Scope and Work Plan where appropriate. The discussion and adoption of the Work Plan/Schedule and Work Product Descriptions will provide a clear definition of what will be done and when. Workshop discussions will be held to discuss issues, present approaches and refine project strategy and direction. Much of what is developed in this task will form the basis for an agenda for the kickoff and subsequent meetings for the committee work as identified above.

**Task 1.3 – Examine Existing Data – Vanir Report** – The purpose of this Task is to analyze the full range of information and data prepared by Vanir in their Los Angeles County Jail Plan, Final Report – April 21, 2014. This includes the development and validation of the architectural space program, and to work to custom design data collection/survey methodologies that will capture the required information in a consistent, reliable manner that reflects the mission and operations of this facility.

This involves:

- Careful evaluation of reporting/data requirements
- Modification of forms and/or methods that the Team has used successfully in previous projects. This will include the refinement of prior survey forms and records of discussion of prior staff interviews and of course, the corresponding results.  
Highlighting challenges and lessons learned from similar projects and working to get ahead of these tasks before they become barriers.
- Refinement of data collection forms and strategy to assure a consistent, quality database.

The purpose of this task is to determine what base information exists and to structure the means to obtain additional information that may be required. In order to effectively structure on-site data collection (Phase II), it is necessary to compile, organize, and evaluate all available initial base information.

- For the existing structures, this will include any available site plans, building plans and previous design/pre-design studies
- For operations analysis, this will include working with each of the County departments to understand current staffing plans, operational budgets and costs, the offender transport study and other related information for the existing facility.
- Available base data will be analyzed in conjunction with the data collection instruments to measure the difference between what information is available and what will be required. The extent of fieldwork data collection required will be reflected in refined Project Work Plan/Schedules that are also a product of this Phase.

**Task I.4 – Submit Interim Report** – This task integrates the efforts of the prior activities in this Stage to document and present the results in an understandable format for all participants. Effectively, the Phase I Report provides a foundation of information known about the project at this point, and outlines the rationale and detailed plan to accomplish the rest of the project in a most efficient manner including the guiding principles and objectives to be achieved.

**The actual deliverables in this phase will include:**

Meeting minutes, rosters and lists of all committees, members and meeting schedules, organization charts depicting oversight, lines of communication and approval authority, a refined timeline for the overall project along with milestone dates and reporting schedules as well as liaisons with the US Dept. of Justice, Board of State and Community Corrections (BSCC) if desired and stakeholders such as the Board of Supervisors.

This information will all be compiled into a Draft Phase I Report and submitted for a two week review period. Comments will be received from the County and incorporated into the draft resulting in the Final Phase I Report. So as to maintain momentum, as well as the aggressive schedule, work will commence on Phase II prior to receiving Phase I comments.

## **Phase II – Survey, Inventory & Data Analysis**

This phase represents the primary data collection effort of the study. Activities during this stage will focus on the development of a qualitative and quantitative inventory of all infrastructure, site and physical facilities currently located on the site, refine the architectural space program, site testing current and future supportable capacity to determine feasibility of the Vanir report and to seek alternative solutions on the placement of the building components.

Phase II includes thirteen (13) major tasks as follows:

- II.1 Research National Trends
- II.2 Conduct Facility Assessment
- II.3 Convene Programming Workshop

- II.4 Validate Program Space Index and Data Base
- II.5 Conduct Geotechnical Survey (optional)
- II.6 Refine Adjacency Diagrams
- II.7 Summarize Space Compilations
- II.8 Review Title 24 and other relevant Standards (including licensing and Certification)
- II.9 Prepare Draft Program/Cost Estimate
- II.10 Initiate ALTA Site-wide Survey (optional)
- II.11 Assistance as Required for NEPA/CEQA Approval (optional)
- II.12 Prepare Draft Report/Cost Estimate
- II.13 Milestone Review

Following is a detailed description of what is envisioned to occur within each of the tasks:

**Task II.1 – Research National Trends** – As a basis for comparison, national trends and best practices related to treating the mental health inmate population and to design environments in a correctional setting will be researched. In this task, an environment is imagined in which best correctional mental health practices takes place. These are conceptual benchmarks against which real-world approximations to best practice environments may be measured. A representative, if not comprehensive, list of principles consistent with such a state of affairs would be part of this task. This research will be led by Jay Farbstein and Brenda Epperly as mental health subject matter experts in the field of correctional operations and functions. Additionally, trips to new similar facilities as a group may be warranted. It is anticipated that the costs for these trips could be funded through the reimbursable allotment. Additionally, a technical assistance grant for travel may be able to be procured through the National Institute of Corrections, with whom Roger and Jay have worked for many years.

**Task II.2 – Conduct Facility Assessment** –An architectural/engineering team will visit each facility and conduct a walk-through visual survey of each site and major buildings. A site and engineering utility survey team will visually assess the site infrastructure so that the utility availability versus the utility requirements for the Consolidated Correctional Treatment Facility is known. The purpose of this exercise is two-fold. First it provides a basis of knowledge so that the consultant team recognizes the background from which the staff is operating, and second it provides for an understanding of the physical condition of the facility with an eye towards a demolition schedule.

This task includes the analysis of the baseline projections completed by the LASD and the Vanir study. In addition to refining the output as developed, we will look to understand the basic

assumptions of the model and what drove the projections. This task will also include refinement of previous work completed on historic and projected trends in the mental health population based geography/region, age, security level, special needs and medical requirements. It is the intent of AECOM to use the information that has already been developed for this task. This information will also inform the discussion related to the development of specialized facilities based on offender needs such as mental health, inpatient medical, short-term sentenced, State re-entry commits, etc. This analysis is important to the overall planning and programming process, as the decision to specialize facilities directly impacts programmatic space needs related to future planning.

**Task II.3 – Convene Programming Workshops** – A series of Programming Workshops will be held with each of the individual committees as well as the Project Steering Committee along with key policy makers as a basis for adopting an approach to develop policy and procedure level decisions, analyze “best practices” and discuss how they would/could influence the development/refinement of the operational program as well as the architectural space program. During these meetings, alternate scenarios can be discussed. The purpose of the workshops is to provide a perspective on programmatic needs and technological options. This workshop will allow AECOM and our consultants to leverage the information gathered to date and provide the County and user group’s data with which to make an informed decision on how the functional design of the facility will affect the operations.

These workshops will be led by Jay Farbstein and Brenda Epperly with active participation from senior AECOM representatives. This will represent the genesis of identifying the issues and where they are best located in terms of functionality. New operational paradigms will be explored that maintain intent and programmatic premise of Option 1B.

**Task II.4 – Validate Program Space Index and Data Base** – Through the vehicle of the Programming Workshops, all of the spaces previously identified will be re-confirmed in terms of their functionality which will relate directly to size, placement and adjacencies. Any spaces that will be required based on the development of the functional program that have not yet been identified will be added to the Space Index along with its associated size and specific requirements. Sizing of each of the spaces will be based upon ACA and/or County standards derived from a database that will allow for continuity and consistency within similar room types throughout the proposed complex. Coupled with the Adjacency diagrams, the Space Index will define the size and location of the various components that will make up the CTTF.

**Task II.5 – Conduct Geotechnical Survey (optional)** – An essential element of our work plan is to prepare a geotechnical survey of the site, predominantly, where potential areas of future development may occur. This will provide for a consistent datum basis for the Design/ Builders. Borings will define the various stratum and water table elevations as a basis for the design-builder to design the foundation system for the complex. The intent will be to present the facts without a recommendation for a solution in the form of a building, engineering or foundation,

etc. type. Further, water testing will occur and reports will be submitted to the County for their use.

Based on the site survey, geotechnical reports, programmatic and parking requirements, constraints and opportunities to expand existing sites will be defined. Potential site expansion or infill areas will be depicted graphically, along with an analysis of issues related to the environment, land development of utilities that may impact expansion.

**Task II.6 –Refine Adjacency Diagrams** – Once all of the spaces required have been identified and confirmed, the adjacency diagrams will be refined so as to establish circulation spines where required as well as identify key access points for various component functions. These diagrams will be developed and/or confirmed on the basis of the functioning of each individual component and the associated rooms that make up that component. These diagrams will be established as the micro adjacencies. Each component will form its own area and the interrelationships and functionality with other components will be identified as well. These diagrams will form the macro adjacencies. Additionally, there may be the need to provide additional macro adjacencies that will identify how the portions of the overall project relate to one another such as the parking structures to the CCTF tower and related facilities such as the Central Plant. These too, will be identified. This exercise in essence will define the functioning of inmate and staff movement.

**Task II.7 – Refine/Summarize Space Compilation** – Key to the project’s success will be the development of a detailed program that integrates space needs with operational needs, policies and procedures, and establishes the basis for design, as well as future expansion. The existing Vanir program will be used as a basis to start this exercise. While planning addresses strategy and direction, as well as broadly defined interests, ideas, costs, and alternatives, programming, by contrast, is very specific and defines the kind, size, number, relationship, and expected operation of every space to be included within a particular building. Providing that level of detail will be the focus of the following set of tasks.

- **List facility components** – Based on the deployment analysis using the previously developed Vanir report, we will prepare a final listing of all building occupants and functions. This will serve as the organizational template for program documentation.
- **Define design objectives** – The new facility will have a mission statement, a broad description of its operational intent, and the type of image that should be projected. The CCTF is not just workplaces and a treatment facility. It is also a critical public facility that is important to the community. As such, their perception and acceptance for the treatment and confinement of inmates with mental health disorders is of paramount importance. Bearing this in mind, the team will develop design objectives both by component and for the building as a whole that will answer the treatment needs of the inmates, operational needs of the staff and address the needs and perceptions of the public.
- **Define appropriate space standards and design guidelines** – The team will use the California Design Guidelines, Title 24, Title 15 and all other relevant material, as a basis

for the allocation of spaces for cells, medical, program, treatment, and general office functions. These standards and guidelines will be flexibly applied based on a thorough understanding of the function of each staff person and space. Additionally, Department of Justice report findings will be incorporated.

- **Document component organization, staff and operations** – Every occupant group will be carefully described, its staff detailed, and its functional/relational interests described in sufficient detail to inform the design professionals of their operational requirements. We will develop this information primarily through interviews with component representatives and surveying existing spaces. The interview process will be extensive and may include visits to each department as needed to fully confirm their required space needs.
- **Provide space lists** – We will refine the Vanir Report including the detailed space lists and identify any missing components for each occupant group, including both staff spaces (defined by standards) and supporting spaces developed from the interview process and assessment of existing and projected patterns of operations. Key to this process is to not only identify the required spaces, but also the spaces often overlooked and not identified thereby never being designed into the project. These spaces such as staff washrooms, janitor closets, storage areas, etc. will be identified so as to make their inclusion a reality.
- **Develop adjacency diagrams** – Each departmental description, operational narrative and space list will be accompanied by a diagram or set of diagrams detailing the relationships of the spaces within each department as well as among departments (and other buildings on the campus). These will not be floor plans, but will aid the occupants and the design-build teams in clarifying the organizational and operational expectations and confirm that the spaces will function together in a supportive way.
- **Define parking needs** – Based on the development and approval of the final program, the estimated parking requirements for staff, including shift change, and any general public use, will be calibrated as a means to determining the final size of the parking structures for the two areas.

**Task II.8 – Review Title 24 and other relevant Standards** – Initial activities will focus on developing space requirements based on Titles 15 and 24 standards and translating them to per-inmate algorithms for modeling projected capacities. In addition, this review can include ACA Standards for Adult Local Detention Facilities, Fourth Edition, as well as all relevant public health standards addressing mental health facilities.

**Task II.9 – Prepare Cost Estimate** – Using the refined architectural space program, a cost estimate will be prepared to confirm the project is within the County's budget and make any programmatic adjustments as required.

**Task II.10 – Initiate ALTA Site-Wide Survey (optional)** – A complete ALTA site-wide survey will be initiated as part of Phase II work efforts. An initial photogrammetric survey will be prepared to define topography, road and building location and other information readily available from

aerial photography. This survey will be field verified and additional data collected related to utility sizes and invert depths, service points, meters, manhole locations etc. as well as all significant site features.

**Task II.11 – Assistance as Required for NEPA/CEQA Approval (optional)** – Per our discussions, AECOM is prepared to work with The Planning Center in terms of any required coordination for environmental work. This will include all required efforts on the part of AECOM and our consultants for required NEPA/CEQA approvals. An agreed upon allowance has been set aside for this effort.

**Task II.12 – Prepare Draft Report** – A draft report of findings will be prepared to summarize the data as identified in the previous steps. This will be reviewed with the Project Committee.

**Task II.13 – Milestone Review** – The culmination of all of the above efforts will be presented and comments will be solicited. Those comments will be integrated as part of the project development process. If desired, a presentation can be prepared and delivered to all appropriate parties when required.

**The actual deliverables in this phase will include:**

Meeting minutes, amended rosters and lists of all committees, members and meeting schedules, organization charts depicting oversight, lines of communication and approval authority, an updated timeline for the overall project along with refined milestone dates and reporting schedules as well as liaisons with regulatory agencies and stakeholders. Additionally, the initial survey and inventory will be submitted for review along with projected costs for key components. The draft refined program will be submitted as well which will include all of the adjacency diagrams as well as the refined space lists and operational narratives. At the conclusion of this phase, the County will have two valuable tools in terms of the program that will establish the **WHAT** of what is required as well as the inventory which will establish the **WHERE** as in where is placement suitable for the “what” to occupy on an interim and permanent basis.

This information will all be compiled into a Draft Phase II Report and submitted for a two week review period. Comments will be received from the Steering Committee and incorporated into the draft resulting in the Final Phase II Report. Similarly to Phase I, so as to maintain momentum, as well as the aggressive schedule, work will commence on Phase III prior to receiving Phase II comments. Together, the Phase I, II, and III reports will comprise the Scoping Document.

### **Phase III – Definition and Evaluation of Building Development**

This phase will focus on analyzing the information collected during Phase II, and integrating the assessment of current conditions and projected capacity and operational needs. Also during this phase, a general assessment of operational changes that may reduce total projected facility needs will be completed. In effect, the analysis completed during this phase along with the Phase II database will

serve as the foundation for the synthesis of the planning efforts into planning recommendations during Phase IV, Recommended Building Plans.

The intent of this phase is not to create comprehensive floor plans that will dictate where every room or space and its corresponding size is to be situated. This phase will identify where approximately within the confines of the structure(s) any department and the associated room assigned to that department will be planned. The documentation will be more similar to blocking and stacking diagrams than to actual floor plans thereby allowing more flexibility and creativity to the design builders without sacrificing the operational goals as defined in the program.

Additionally, included within the activities of this phase, the team will develop overall costs to be used in projecting the viability of alternatives and the eventual development of the overall capital program. The Vanir Report will be analyzed as well during this phase so as to establish the potential for different building configurations, locations, and site development options on the existing site. Following is a more detailed description of the seven specific tasks identified under this phase.

Phase III includes seven major tasks:

- III.1 Define and Develop Existing Site Alternatives
- III.2 Comparative Analysis
- III.3 Building Alternative Workshop/Refine Building Development Frame Work
- III.4 Refine Building Development Plan Frame Work
- III.5 Prepare Phasing and Move Management Plan
- III.6 Prepare Draft Plans and Cost Estimates
- III.7 Milestone Review

Following is a detailed description of what is envisioned to occur within each of the tasks:

**Task III.1 – Define and Develop Existing Site Alternatives** – This stage will focus on analyzing the information collected during Phase II, and integrating the assessment of current conditions and projected replacement needs. In effect, the analysis completed during this phase along with the Phase II database will serve as the foundation for the synthesis of the planning efforts into the development of the scoping documents.

Using the Vanir Report as a basis, the planning team will develop the most optimal project design and delivery method. The formulation of alternative construction phasing plans for analysis will be developed in concert with LADPW, CEO and LASD so they are reflective of an appropriate, realistic and affordable range of actions. As part of the activities in this phase, the team will develop an overall database to be used in projecting the cost of spatial and physical improvements associated with the analysis of alternatives and the eventual development of an

overall cost loaded schedule. Unit budget prices will be based on each component/building type. The construction cost database will allow the projection of the costs of new construction and permit a comparison of construction types. An example may be the use of steel versus concrete, or one tower versus two.

**Task III.2 – Prepare Comparative Analysis – Site plan** alternatives will be analyzed and compared based on a series of factors identified in concert with the Project Review Committee. We will develop comparative data for each factor and provide an initial comparative evaluation of the various approaches, which will be discussed with the County in a workshop.

Criteria for comparative evaluation may include:

- Construction Costs
- Long Term Operation Costs
- Feasibility of Implementation
- Programmatic Suitability
- Operational Flexibility
- Site circulation
- Site Security
- Environmental Sensitivity
- EIR/CEQA Requirements
- Dependency on Other Actions
- Schedule and Phasing Implications
- Annual Implementation Costs

**Task III.3 – Building Alternative Workshop –** A series of construction phasing and building configurations will be presented for the Consolidated Correctional Treatment Facility site including alternative phasing of the utilization of the existing structures. The initial focus for each option will be on how best to locate, plan, construct and phase the new Consolidated Correctional Treatment Facility. Permutations and combinations will add to the number of potential sub-options allowing the County flexibility in establishing the direction of the Implementation.

**Task III.4 – Refine Building Development Plan Frame Work –** The results of the workshop will be compiled and presented in a draft report outlining an overall framework for the implementation. Based on this review, the framework will describe what the functional operation and physical plant at the Consolidated Correctional Treatment Facility will look like in the future. The framework as defined at the end of Phase III will be further developed in the final phase into a rank-order, phased Building Development plan. This will include the blocking and stacking diagrams. Later, as the final plan is formulated, an action plan can be modified as required to provide a perfect fit in the overall phasing and implementation plan.

**Task III.5 – Prepare Phasing and Move Management Plan** – Based on a selected plan for the development of the new Consolidated Correctional Treatment Facility, a phasing plan will be developed that illustrates and describes the sequence of activities that would occur during the implementation period. The plan would also, at a high level, identify how to manage the various moves that would occur with each agency during this time frame. Further, operations during the interim periods must not be compromised and therefore must be addressed at each successive phase.

**Task III.6 – Prepare Draft Site and Building Plans and Cost Estimate** – This task includes the development of a report and statement of probable cost summarizing all of the activities completed in Phase III. Reports will address current conditions, functional considerations, supportable capacity, and constraints and a variety of opportunities for expansion and the new facility construction. A report will be prepared outlining the overall recommended framework for planning and implementation.

**Task III.7 – Prepare Milestone Review** – The final framework for planning will be reviewed with the Project Review Committee prior to proceeding into Phase IV. As required, presentations can be made to a variety of stakeholders as well as regulatory agencies in this as well as prior phases. This might include the Board of Supervisors as well as representatives of the Department of Justice. Further, despite not being a direct requirement, we are prepared to work with the County by attending meetings specifically geared for Community Outreach and Public Relation purpose.

**The actual deliverables in this phase will include:**

Meeting minutes, an updated timeline for the overall project along with refined milestone dates and reporting schedules will be included as with all phases. This phase will also provide for the draft blocking and stacking diagrams derived from the final program which will also be submitted. Additionally, the initial draft site and building plan analysis and report will be submitted along with recommendations, potential phasing and implementation plans and associated costs. This information will all be compiled into a Draft Phase III Report and submitted for a two week review period. Comments will be received from the Steering Committee and incorporated into the draft resulting in the Final Phase III Report. Similar to Phases I and II, so as to maintain momentum, as well as the aggressive schedule, work will commence on Phase IV prior to receiving Phase III comments.

**Phase IV – Recommended Building Plans**

This phase represents the point in the process where all of the previous work becomes assimilated and the results begin to form the basis of a comprehensive study. As such, during this phase, while decisions are still somewhat flexible, presentations to both Stakeholders and regulatory agencies should be include. At the conclusion of this phase enough information will have been developed so as to establish an overall direction along with a consensus.

Following are the seven tasks identified to make up Phase IV:

- IV.1 Refine Physical Facility Documents/Scope (stacking and blocking)
- IV.2 Refine Capital Construction Cost Factors
- IV.3 Refine Operational Cost Factors
- IV.4 Refine Phasing and Move Management Plan
- IV.5 Produce Draft Building Plans
- IV.6 Present & Distribute Draft Building Development Plan
- IV.7 Incorporate Comments & Reissue with Executive Summary

Following is a detailed description of what is envisioned to occur within each of the tasks:

**Task IV.1 – Refine Physical Facility Documents/Scope** – Consistent with the new development concepts defined in the Building Development Plan Alternatives Workshop, each contemplated capital construction action will be refined for the sites, structures, and infrastructure, and, as appropriate, additional detail will be provided for each Building Development Plan option. These will be reflected in the blocking and stacking diagrams.

**Task IV.2 – Refine Capital Construction Cost Factors** – For each Building Development Plan element, its capital and life cycle impacts and costs will be updated, based upon its intended implementation period in the Phasing/Implementation Plan. All of the interim phases as well as the final completion will need to be addressed in this task.

**Task IV.3 – Refine Operational Cost Factors** – For each Building Development Plan element, its operational impacts and costs will be updated based upon its intended implementation period in the Phasing/Implementation Plan. All of the interim phases as well as the final completion will need to be addressed in this task. Staffing will be provided by the County departments based on the proposed options.

**Task IV.4 – Refine Phasing and Move Management Plan** – similar to the construction and operational cost factors, the phasing, Implementation and move management of each Building Development plan will be refined to help arrive at a final recommended solution. With a clear grasp of the physical and operational scope of work/impacts for each contemplated Building Development plan element, a specific Phasing/Implementation Plan will be developed for each component. Many actions, be they operational, planning or construction will be dependent on or related to other actions and need to be phased for optimal benefit.

**Task IV. 5 – Produce Draft Building Development Plans** – This task produces the pre-publication documentation of all the key elements in the overall Building Development plan, including policy objectives, existing conditions, standards, options considered, proposed actions,

anticipated operational/capital construction costs, schedule, phasing and the basis for decision-making. Copies will be provided for review and comment prior to development of the final document. This phase also represents the compilation of all of the previous work on the final blocking and stacking drawings as well as all of the other documents that were created, producing a comprehensive report along with an Executive summary. Prior to the next two tasks, this task represents the development of the final draft.

**Task IV.6 – Present and Distribute Building Development Plan** – The draft report will be presented to LADPW and the County departments as part of the review process. Presentations can be made as required.

**Task IV.7 – Incorporate Comments and Reissue with Executive Summary** – This phase focuses on the synthesis of the recommendations developed in the prior Phases. At the completion of this phase the team will proceed with the development of the scoping documents for the various phases of the implementation plan for the Consolidated Correctional Treatment Facility.

**The actual deliverables in this phase will include:**

Meeting minutes, an updated timeline for the overall project along with refined milestone dates and reporting schedules will be included as with all phases. This phase will also provide for the draft plan along with the associated construction and operational costs. The refined phasing and move management plans will be submitted as well also along with associated costs. Public and Stakeholder presentations will be included in this phase as well. All of the information will be compiled into a Draft Phase IV Report and submitted for a two week review period. Comments will be received from the Steering Committee and other appropriate sources will be incorporated into the draft resulting in the Final Phase IV Report.

#### **Phase V – Design/Build Procurement Scoping Documents.**

This phase represents the final culmination of all of the previous efforts into a document that can be used to procure proposals from design/ build teams that will answer the County's issues and will be consistent with one another. Much of this Phase will be explaining the "hows and whys" of the work to date in narrative form. The specifications outlining the direct criteria required to be included in a design/ build proposal submittal will be included in this phase as well.

The final Phase, Phase V is made up of five tasks as follows:

- V.1 Project Specific Life Cycle Cost Criteria
- V.2 Develop Scoping Documents (including all specifications of materials, finishes, security systems including low voltage as well as provisions for specialized medical equipment)
- V.3 Utility Availability and Points of Connection
- V.4 Site Analysis

## V.5 Basis of Design Report

Following is a detailed description of what is envisioned to occur within each of the tasks:

**Phase V.1 – Project Specific Life Cycle Cost Criteria** – Working in concert, AECOM’s team of architects and engineers and the LA County facilities management group will begin identifying, exploring, and analyzing various building systems that provide a strong life cycle cost for the building that will be incorporated into the scoping documents. The goal of this is to refine specific systems such as the use of a vacuum sewer system versus gravity. Another example might be specific cell component construction.

**Phase V.2 – Develop Scoping Documents** – This task comprises the development of a comprehensive set of scoping documents for the various components of the new Los Angeles County Consolidated Correctional Treatment Facility. The documents will consist of output specifications describing all the building and infrastructure systems, Specifications including materials and finishes, the architectural space program, and blocking/stacking diagrams illustrating the relationships and optimal adjacencies of all components at the site and in the buildings. Site plans illustrating the proposed layout will also be refined as part of this package. The documents will also identify all the code and regulatory requirements necessary for approvals. Additionally, there will be full written narratives for all aspects of the plan and the required submittals.

**Phase V.3 – Utility Availability and Points of Connections** – As part of the scoping documents, a series of utility site plans as well as preliminary criteria for a central plant will be prepared and submitted for each design-build team to understand the availability and capacity of utilities coming to the site for the project development.

**Phase V.4 – Submit Site Analysis** – The Scoping Documents will also include site analysis that include the geotechnical report (currently optional), surveys, point of access, and other site features that must be known by each design-build team in preparation of their technical and cost proposal. However, recommendations as to how to address the data will not be included.

**Phase V.5 – Basis of Design Report** – This task will result in the compilation of the entire Scoping Document Package for Los Angeles County’s review prior to issuance to the short-listed design-build teams. This task will also include the completion of the specifications required for development so as to further define the level of quality expected in the future design/ build submittals.

### **The actual deliverables in this phase will include:**

Meeting minutes, an updated timeline for the overall project beyond the preparation of this report and associated documents, along with refined milestone dates and reporting schedules as well as liaisons with regulatory agencies and Stakeholders will be included as with all phases. This phase will also provide for the final plan along with the associated construction and

operational costs. The final phasing and move management plans will be submitted as well also along with associated costs. Additional Public, Stakeholder and regulatory agency presentations will be included in this phase as well if required and/or deemed appropriate. All of the information will be compiled into a Final Draft Report and submitted for review. Comments will be received will be incorporated prior to issuing the Final Report.

The Final Report will consist of Specific Life Cycle Cost Criteria, Final Scoping Documents, Utility Documentation and Recommendation, Site Analysis and a Basis of Design report including Specifications.

### **Allowances**

Following is a list of allowances identified in the proposal to be used at the County's discretion:

EIR Coordinating Allowance: \$100,000.

This is to be used for AECOM's coordination with the County's consultant producing the EIR

Community Outreach Allowance: \$100,000.

This is to be used for AECOM's Coordination with either the County or their consultant for Community meetings and additional outreach or public relations.

Design Build Support: \$250,000.

The Design build Support Phase is an additional service outside of the base proposal. It is intended to provide support to the County during the Design Build procurement process.

County Additional Services: \$500,000.

This sum is to be used at the County's discretion for as of now, unforeseen tasks and expenses as the County sees fit.

### **General**

The specialized consultants to be used on this project and the areas of their expertise are as follows:

- JFA Associates Jay Farbstein , Principal *Corrections Mental Health Programmer*  
Brenda Epperly, Associate
- Sasha Schwartzkopf *Civil Engineering*
- Manojt Sinha *Site Utilities*
- Virgil Aoanan *Site/ Civil*
- Lynn Capouya *Landscape Arch.*
- TBD *Vertical Transportation*
- Marshall Associates *Food and Laundry Design*
- Cummings *Cost Estimating*

The specialized services to be provided by AECOM personnel on this project and the areas of their expertise are as follows:

• Ken Jandura	<i>Programmer</i>
• Sofia Tata	<i>Programmer</i>
• Gary Gayhart	<i>Physical Security</i>
• Doug Milby	<i>Electronic Security</i>
• Carolyn Stegon	<i>Structural</i>
• Gary Stephens	<i>Electrical</i>
• Andy Reed	<i>Mechanical</i>
• Jack Campbell	<i>Fire protection</i>
• Jerry Flores	<i>Environmental</i>
• Aly MacGregor	<i>Energy Modeling</i>
• TBD	<i>LEED Compliance</i>
• TBD	<i>Traffic Consulting</i>
• Steve Galloway	<i>Move Management</i>
• QC Team(TBD)	<i>Quality Control</i>

In addition to the above, the Senior Management team consisting of John Van Whervin, Roger Lichtman, Dave Voda and/or Pete Obarowski will be committed to the project. Supplemental assistance will be provided in the areas of CADD support, Specifications, Technical Coordination, additional Behavioral Health input and Code review. Allowances have been identified above for all other currently envisioned, or as of now, not yet envisioned tasks.

### *Conclusion*

Upon completion of the above elucidated scope of work, LA County will possess a comprehensive set of tools with which to direct the Design/Build Teams to develop optimal solutions which will address the needs of the treatment center with special attention paid to mental health. From the submittals and the submittal process, the County will be able to implement a strategy as laid out over the next months. To that end, we are proud to be able to be considered a part of the process that will shape the future of mental health/substance abuse treatment delivery in the County and possibly beyond.



County of Los Angeles  
**CHIEF EXECUTIVE OFFICE**

Kenneth Hahn Hall of Administration  
500 West Temple Street, Room 713, Los Angeles, California 90012  
(213) 974-1101  
<http://ceo.lacounty.gov>

WILLIAM T FUJIOKA  
Chief Executive Officer

October 31, 2014

To: Supervisor Don Knabe, Chairman  
Supervisor Gloria Molina  
Supervisor Mark Ridley-Thomas  
Supervisor Zev Yaroslavsky  
Supervisor Michael D. Antonovich

From: William T Fujioka  
Chief Executive Officer

Board of Supervisors  
GLORIA MOLINA  
First District

MARK RIDLEY-THOMAS  
Second District

ZEV YAROSLAVSKY  
Third District

DON KNABE  
Fourth District

MICHAEL D. ANTONOVICH  
Fifth District

**STATUS REPORT ON THE PROPOSED CONSOLIDATED CORRECTIONAL  
TREATMENT FACILITY SITE PLAN EVALUATION (ITEM NO. 24, AGENDA OF  
AUGUST 5, 2014 – CONTINUED FROM AGENDA OF JULY 29, 2014)**

Item No. 24 on the August 5, 2014 Board agenda, recommends actions needed to carry out Supervisors Molina and Antonovich's May 6, 2014 motion to further refine and develop performance criteria and initial design of Vanir Construction Management's (Vanir) Option 1B, which proposed design and construction of a Consolidated Correctional Treatment Center (CCTF). Additionally, the Board directed the Chief Executive Office (CEO) and Department of Public Works (DPW) to return in 90 days with potential cost savings and efficiencies to reduce the overall capital cost of the proposed Project.

AECOM Inc. (AECOM) has evaluated Vanir's Option 1B, and has identified potential strategies to reduce overall capital costs. We are enclosing AECOM's report to provide the site plan considerations, schedule and phasing considerations, and analysis of strategies to improve efficiencies. AECOM will continue to refine these strategies, and we will report back to the Board in 90 days with a status update on their progress.

If you have any questions regarding this matter, please contact Santos H. Kreimann at (213) 974-1186.

WTF:SHK:DJT  
TJ:MJD:rp

Attachment

c: ✓ Executive Office, Board of Supervisors  
County Counsel  
Public Works  
Sheriff

*Please Conserve Paper – This Document and Copies are Two-Sided  
Intra-County Correspondence Sent Electronically Only*



**AECOM**

# SITE PLAN EVALUATION

LOS ANGELES COUNTY

CONSOLIDATED CORRECTIONAL TREATMENT FACILITY

FINAL REPORT: OCTOBER 17, 2014



# TABLE OF CONTENTS

---

<b>1</b>	Executive Summary.....	1	<b>SUMMARY &amp; OVERVIEW</b>
<b>2</b>	Introduction to the Report.....	2	
<b>3</b>	Background and Purpose.....	3	
<b>4</b>	Process & Methodology.....	4	
<b>5</b>	Participants.....	5	

---

<b>6</b>	Existing Conditions.....	6	<b>SITE PLAN AND OPTIONS</b>
<b>7</b>	Site Plan Goals and Requirements.....	8	
<b>8</b>	Option 1B Site Plan.....	11	

---

<b>9</b>	Schedule and Phasing Considerations..	17	<b>ANALYSIS</b>
<b>10</b>	Project and Construction Cost .....	21	

---

<b>11</b>	Strategies to Improve Efficiencies.....	22	<b>STRATEGIES GOING FORWARD</b>
<b>12</b>	Items to be Addressed and Resolved....	24	
<b>13</b>	Emerging Design Criteria.....	26	
<b>14</b>	Next Steps.....	27	

---

<b>A</b>	Preliminary Engineering Assessments....	A.1	<b>APPENDIX</b>
----------	---	-----	-----------------

# 1 SUMMARY & OVERVIEW

## Executive Summary

Working with County stakeholder agencies, the first step of AECOM's Scoping Documents services for the County of Los Angeles' Consolidated Correctional Treatment Facility (CCTF) is a Los Angeles County Jail Plan Independent Review and Comprehensive Report performed in collaboration with Vanir Construction Management, hereinafter referred to as Option 1B, April 2014, which was approved by the Board of Supervisors on May 6, 2014. The proposed CCTF project is a \$1.967 billion, 4,860-bed new facility with other Sheriff and County support functions on the site of the existing Men's Central Jail, and Central Arraignment Court.

County stakeholders agreed that achieving occupancy of the CCTF within a reduced schedule should be a key aspect for consideration as part of the AECOM Site Plan Evaluation effort. This was in response to multiple issues including the Department of Justice's monitoring of County jail facilities, and its June 4, 2014 statement of intent to seek court oversight of the jails related to mental health care conditions. Additional issues include the County's need to improve disabled access and the escalation of construction costs over time. Strategies to achieve earlier occupancy included increasing the portions of the site that could be utilized for construction by allowing:

- Early demolition of the 1970's jail and providing interim off-site housing
- Demolition of the 4-story parking/bus garage and providing more interim/long-term replacement parking.

The net result is Option 1B, November 2014, which achieves CCTF occupancy sooner than the corresponding dates of the baseline scheme. One of the effects of achieving occupancy sooner, using the above, is an increased disruption to existing operations and utilization of temporary facilities for inmate housing, Court Line, parking, and bus maintenance. These operational items are the subject of current and future research in collaboration between the Chief Executive Office, Sheriff's Department, Department of Public Health, Department of Mental Health, Department of Public Works, Superior Court, Probation Department, and AECOM.

## 2 SUMMARY & OVERVIEW

# Introduction to the Report

This Site Plan Evaluation Report has 4 parts: **Summary and Overview**, **Site Plan and Options**, **Analysis**, and **Strategies Going Forward**.

**Summary and Overview** includes an executive summary, the introduction to the report, the background of the project and purpose of the Site Plan Evaluation exercise, the process and methodology utilized for involvement and input from stakeholders, and the list of County and consultant participants.

**Site Plan and Options** focuses on the overall site plan requirements, the existing site conditions, project and site plan goals, and the alternative versions evaluated.

**Analysis** presents schedule and phasing considerations, project and construction cost considerations, and describes the assumptions and results of the analysis.

**Strategies Going Forward** reviews strategies for improving first-cost and ongoing operational cost efficiencies as the AECOM scoping document project progresses. This section identifies unresolved issues that the County and the consultant will address going forward to support implementation of the selected site plan concept. The final outcome will then present emerging design criteria. Finally, next steps in the scoping and overall process are identified.

## 3 SUMMARY & OVERVIEW

# Background Purpose

In May 2014, the County of Los Angeles Board of Supervisors approved the LA CCTF Site Plan Evaluation Report authored by Vanir Construction Management dated April 21, 2014, selecting Option 1B with a 2-tower configuration. This is a \$1.967 billion, 4,860-bed new Consolidated Correctional Treatment Facility (CCTF) on the site of the existing Men's Central Jail. In August 2014, AECOM's contract to prepare Scoping Documents for this design-build delivery project including temporary relocation of parking to a site in Chinatown was approved by the Board of Supervisors. In addition to program verification and preparation of criteria documents, the Board requested that AECOM prepare this Site Plan Evaluation and report back to the Board with the identification of areas of opportunity for potential cost savings and efficiencies, and a plan to explore such efficiencies. See Section 11, Strategies to Improve Efficiencies for further efficiencies detail.

The purpose of the Site Plan Evaluation was to review the recently prepared Architectural Program developed by Vanir and to identify potential improvements in function, schedule, operations, and construction costs. The first step was to understand the Vanir study, and the intent of Option 1B, April 2014. Subsequently, at a high-level, AECOM began the process of reviewing the type and quantity of spaces to achieve the mission of the facility and examined options for housing inmates with behavioral health disorders. While still in process, this evaluation is intended to identify areas of opportunity to reduce capital and life cycle costs, condense the construction schedule, understand and mitigate the disruption of operations inherent in development on an occupied site, and enhance the overall development of the site. The result of this re-examination is presented in this report.

## 4 SUMMARY & OVERVIEW

# Process & Methodology

The approach to the Site Plan Evaluation process was an inclusive one: In the spirit of team building and open communication of ideas and concepts, a “charrette” workshop approach was used in meetings with the County of Los Angeles. Stakeholder meetings of 30–35 participants allowed attendees to give and receive feedback, thus gaining and refining ideas and concepts. In addition, AECOM held regular review meetings with Vanir, management meetings with the Department of Public Works and program orientation and clarification meetings with the Department of Mental Health, the Department of Public Health, the Chief Executive Office, and the Sheriff’s Department. Meetings with break-out groups were then reported on at the large stakeholder charrettes so that all participants were informed of developments. Besides these charrette and regular review meetings, Jay Farbstein & Associates, an AECOM consultant, is currently conducting programming meetings with the Sheriff’s Department. These meetings consist of two tracks of multiple session workshops with user groups to verify and clarify program. AECOM anticipates completion of the programming workshops by early in the 1st Quarter of 2015. After the completion of the programming sessions and compilation of the data, findings will be provided to cost estimators to generate a cost based on the revised programming information.

AECOM began with the collection and review of prior studies prepared by Vanir and others in order to understand the current approach, issues, site conditions and facilities. This gave AECOM an initial understanding of the philosophical approach and vision for the CCTF operations and other expectations. Large group workshop discussions allowed the team to discuss issues, present approaches and refine project strategy and direction. What was discussed and developed in these work sessions then served as the basis for an agenda for work to be accomplished in subsequent meetings. This process resulted in updating Option 1B as presented in this report.

The large group participated in the following major work sessions and charrettes:

- Charrette #1: July 23, 2014 – Confirm site plan goals and improvements to study
- Charrette #2: August 7, 2014 – Present site plan strategies, implementation strategies, and refine site plan goals
- Charrette #3: August 27, 2014 – Present expanded site development options and schedule impacts
- Charrette #4: September 10, 2014 – Present refined site development options, schedule impacts, and cost factors
- Charrette #5: September 24, 2014 – Present draft Site Plan Evaluation Report
- Charrette #6: October 9, 2014 – Present responses to comments and review of Site Plan Evaluation Report

# 5 SUMMARY & OVERVIEW

## Participants

### COUNTY AGENCIES

#### Chief Executive Office

Santos Kreimann, Deputy Chief Executive Officer  
Jan Takata, Senior Manager  
Tracey Jue, Manager  
David Turla, Principal Analyst  
Matthew Diaz, Senior Analyst

#### Sheriff's Department

Terri McDonald, Assistant Sheriff  
David Fender, Chief  
Kelley Fraser, Commander  
Gary T.K. Tse, Director  
Marjory Jacobs, Lieutenant  
Kelly Porowski, Lieutenant  
Tab Rhodes, Lieutenant  
Edward Matzen, Clinical Nursing Director II  
Kelly Chiu, Facilities Project Manager

#### Department of Public Works

Massood Eftekhari, Deputy Director  
Jim Kearns, Assistant Deputy Director  
Te-Ling Chou, Capital Projects Program Manager  
Logan Frame, Capital Project Manager  
Alicia Ramos, Capital Project Manager  
Omar Nabahani, Project Manager (Consultant)  
Steve Wagner, Project Manager (Consultant)

#### Department of Public Health

Holly McCravey, Director  
Yanira A. Lima, Program Manager

#### Department of Mental Health

Dr. Stephen Shea, M.D., Director, Jail Mental Health  
Dr. Michael Maloney, District Chief  
Dr. Sara Hough, Program Head  
Dr. David Kidwell, Supv Psychiatrist  
Dr. Jeff Marsh, Supv Psychiatrist  
Dr. Joseph Mirkovich, Supv Psychiatrist  
Elvia Trujillo, Analyst

### COUNTY CONSULTANTS

#### Fehr & Peers (Traffic Studies)

Netai Basu, Principal

#### Placeworks (EIR)

Bill Halligan, Principal

#### Vanir Construction Management

Andrew Freeman, Market Segment Leader, Justice  
Scotty Galloway, Area Manager  
Rob Nash, Senior Project Manager  
Candace Roberts, Project Manager

### AECOM

#### AECOM Technical Services

Roger Lichtman, Senior Vice President, Principal in Charge  
Beverly Prior, Vice President, Design Leader  
Richard Hansen, Vice President, Senior Project Manager  
John Van Whervin, Manager I, Project Manager  
Nina Gladstone, Associate Principal, Project Architect  
Yiling Deng, Associate, Job Captain  
Kenneth Golovko, Vice President, Eng. Manager  
Harley Hanson, Associate Vice President, Civil Engineer  
David Voda, Senior Associate, Management Support  
Betty Sulistio, Senior Administrative Assistant, Project Admin  
Bruce Omtvedt, Architect III, Detention Designer  
Jaylen Yang, Sr. Associate, Sr. Architect  
Sofia Tata, Senior Associate, Programmer  
Rafael Alvarez, Associate, Technical Support  
Behorkh Rahmati-Govari, Designer II, Technical Support  
Seyoon Oh, Designer I, Technical Support  
Anita Wong, Designer I, Technical Support  
Greg Weimholt, Principal, Associate Engineering Lead  
Andrew Reed, Principal, Mechanical Engineer  
Paul Alves, Senior Associate, Structural Engineer  
Jack Campbell, Associate, Fire Safety Engineer  
Brent A. Leif, Manager, Construction Services Specialist  
Raymond Zunino, Construction Manager

#### Jay Farbstein & Associates

Jay Farbstein, Principal Programmer  
Greg Barker, Senior Programmer  
Erin Persky, Programmer  
Brenda Epperly, Principal Medical Planner

#### Cumming Corporation

Bill Rodgers, Managing Principal  
Scott Feeney, Managing Director  
Jerry Piersall, Vice President

## 6 SITE PLAN & OPTIONS

### Existing Conditions

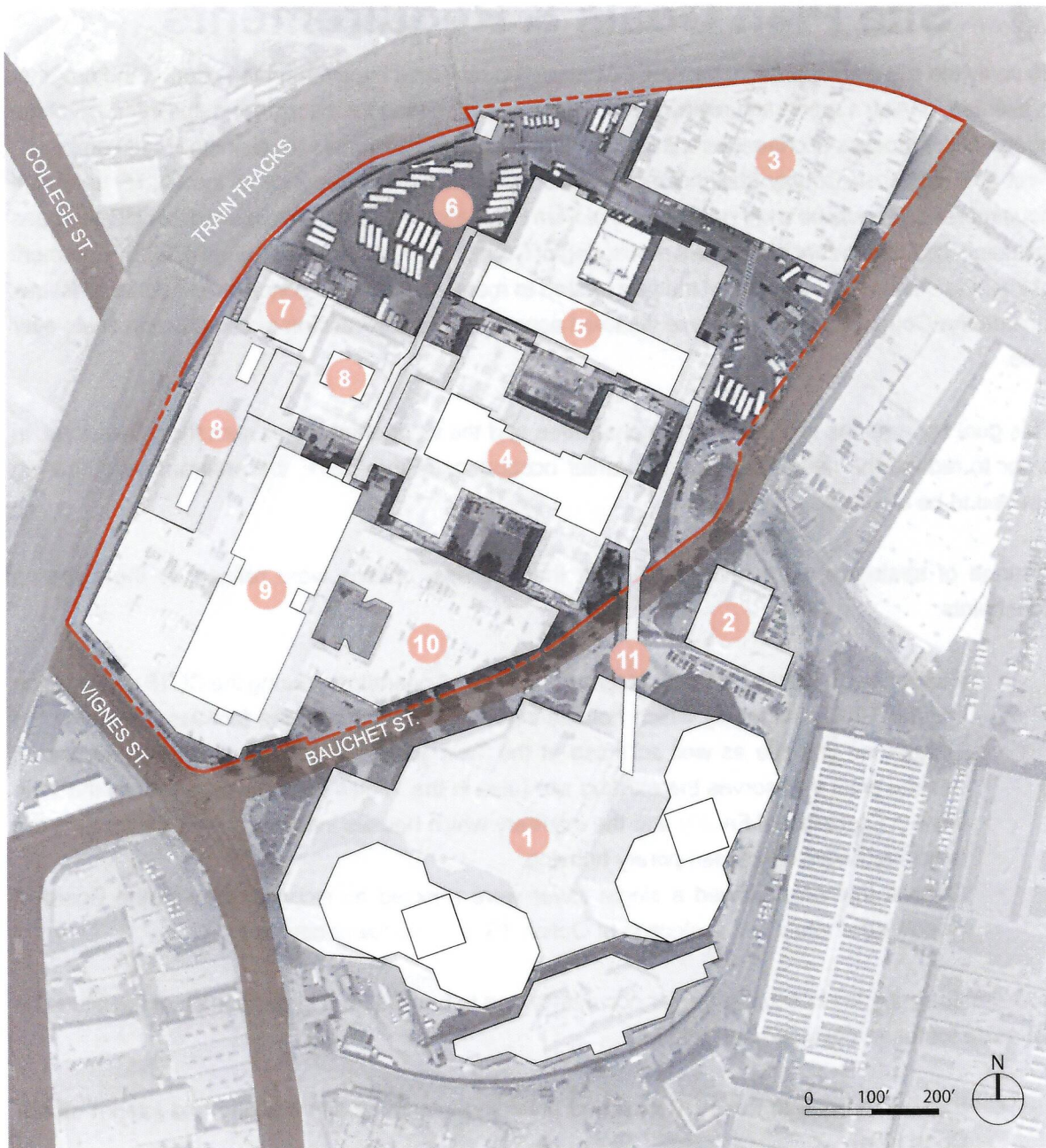
The proposed Consolidated Correctional Treatment Facility (CCTF) will be built on a portion of the downtown Los Angeles County jail complex. The site is bordered by Bauchet Street to the east, Vignes Street to the south, and train tracks to the west and north. Total site area is approximately 771,400 square feet or roughly 17.7 acres with a relatively flat topography. Across Bauchet Street to the south is the Twin Towers Correctional Facility (TTCF) consisting of the two jail towers, the Inmate Reception Center and the Correctional Treatment Center. MCJ and TTCF are connected by a secure enclosed bridge that spans across Bauchet Street. The MCJ site is currently a highly developed site with existing facilities and utilities which will affect construction of the new CCTF.

The MCJ site includes the following primary facility structures described below and indicated on the following diagram:

1. Original 1960's 4-story jail facility with central kitchen, infirmary (addition on the southwest end) and central heating plant. The central heating plant simultaneously serves all buildings on the MCJ site, as well as, the Twin Towers Correctional Facility campus.
2. A 1970's 4-story jail addition with Court Line connected to the 1960's jail located roughly at the center of the site. Secure bus loading yard adjacent to the Court Line at the west end of the 1970's structure.
3. A 4-story staff parking structure, bus parking, and bus maintenance/transportation facility located at the northeast end of the site.
4. A 2-story Central Arraignment Court and 2 level public parking structure located at the south end of the site.
5. An off-site central cooling plant located across Bauchet Street to the south which serves the MCJ and the TTCF campus.

A preliminary assessment of structural, mechanical and electrical considerations for site development is presented in the Appendix.

## SITE DIAGRAM - EXISTING

**LEGEND:**

- |  |  |
|--|--|
| 1. TWIN TOWERS CORRECTIONAL FACILITY                     | 6. COURT LINE AND BUS QUEUING                                    |
| 2. CENTRAL COOLING PLANT                                 | 7. CENTRAL HEATING PLANT   |
| 3. PARKING GARAGE AND BUS MAINTENANCE FACILITY (4 STORY) | 8. INFIRMARY   |
| 4. MEN'S CENTRAL JAIL 60'S BUILDING                      | 9. CENTRAL ARRAIGNMENT COURT                                     |
| 5. MEN'S CENTRAL JAIL 70'S BUILDING                      | 10. PARKING DECK (2 STORY)                                       |
|  | 11. BRIDGE CONNECTION BETWEEN TWIN TOWERS AND MEN'S CENTRAL JAIL |

## 7 SITE PLAN & OPTIONS

# Site Plan Goals & Requirements

To verify the site plan approach, the AECOM team first reviewed the overarching goals of the program presented in Vanir's report and reviewed with Vanir to understand the background and intention of the goals. In the process of charrettes with County stakeholders, additional site planning criteria emerged. First and foremost, County stakeholders agreed that achieving occupancy of the CCTF treatment housing earlier should be a key goal of the Site Plan Evaluation. This was in response to multiple issues including the Department of Justice's monitoring of County jail facilities and its June 4, 2014 statement of intent to seek court oversight of the jails related to mental health care conditions. Additional issues include the County's need to improve disabled access, and the escalation of construction costs over time.

This goal became the key driver of the charrettes and the work effort in between those sessions. In order to reduce the overall duration for earlier occupancy of the CCTF, the programmatic phasing needed to be amended.

A range of strategies were reviewed and in that process, options were refined by the following constraints:

- Buildings and functions that must remain on site and operational during the CCTF construction are the 1960's jail facility which houses inmates and food services facilities that serve the inmates on this site as well as those at the Twin Towers Correctional Facility, the central heating plant that serves the existing site (also in the 1960's jail facility) as well as the Twin Towers Correctional Facility and the infirmary which houses inmate patients for whom there is no alternative off-site temporary housing.
- Options that only allowed a single tower were rejected as inconsistent with the Board of Supervisors' intent in its selection of Option 1B, the two-tower concept.

Acceptable strategies to achieve earlier occupancy and to provide for a larger portion of the site to be set aside for future development included:

- Early demolition of the 1970's jail and providing interim off-site housing and interim off-site Court Line.
- Requirement that any replacement operation for Court Line either be on-site or in close proximity to the existing.

The site plan and overall project goals will continue to evolve in the Scoping Documents process as part of working with stakeholders and identifying areas of efficiency and potential cost savings/reductions. The original study goals and expanded site planning goals are presented in the chart on the next page.

**CCTF Goals  
from April 2014**

1. Close and demolish Men's Central Jail
  2. Plan a Treatment Facility
  3. Plan for flexibility
  4. Meet the requirements of the U.S. Department of Justice Memorandum of Agreement (USDOJ MOA)
  5. Provide treatment program space and staff at the Housing Unit level
  6. Limit inmate movement by bringing services to the inmate.
  7. Meet the requirements of the Americans with Disabilities Act (ADA)
  8. Maximize wheelchair accessible housing for Medical Outpatient Specialty Housing (MOSH) inmates
  9. Plan the building to facilitate an integrated approach to inmate programming, treatment and management
- 

**Site Plan Evaluation  
Expanded Goals for  
November 2014**

10. Shorten total project schedule for earlier CCTF occupancy
11. Retain 60's jail and infirmary until on-site replacement housing is constructed
12. Retain undeveloped site area for flexibility of future operations
13. Collocate the Medical Outpatient Specialty Housing (MOSH), the Correctional Treatment Center (CTC) and the Clinic
14. Locate the CTC and the Clinic for optimal access from the CCTF and the Twin Towers
15. Limit operational disruptions and challenges of displacement of functions and beds
16. Maximize staff efficiency
17. Leverage technology to maximize efficiencies
18. Site efficiencies will cater to visiting/visitors of the facility. Other efficiencies will include enhanced cafeteria services, video visitation, and other areas to be addressed.



## 8 SITE PLAN & OPTIONS

### Option 1B Site Plan

The proposed Los Angeles County Consolidated Treatment Facility Option 1B, April 2014 as approved by the Board of Supervisors is a 2-tower concept developed in a 2-phase process with projected construction completion in 2026 (see Section 9 regarding variance from original report). Selecting Option 1B with two towers was a rejection of the height of a 1-tower, 1-phase Option 1B.

The Site Plan Evaluation process has evolved from Option 1B, April 2014 into the updated Option 1B, November 2014 version which plans for earlier occupancy of the CCTF.

Option 1B, April 2014 and Option 1B, November 2014 are described below regarding the siting and implementation steps. Option 1B, April 2014 is illustrated with the diagram from the April 2014 report. Option 1B, November 2014 is illustrated with a site zoning diagram followed by on-site implementation diagrams that clarify the intended on-site phasing.

It's important to note that some of the implementation requirements are off-site.

## OPTION 1B, APRIL 2014

### Conceptual Site Development - Initial Construction Complete and MCJ Demolished



### Conceptual Site Development - Second Tower Construction



## OPTION 1B, APRIL 2014

---

### Siting

- Phase One CCTF on the site of the existing Central Arraignment Court building and public parking at the south end of the site
  - Phase Two CCTF on the site of the existing 1960's and 1970's jail facilities
  - Existing 4-story staff parking and bus maintenance building at the north of the site are retained
- 

### Off Site Preparation

**Step 0.** Construct off-site parking in Chinatown to accommodate parking loss from Central Arraignment Court; move courthouse functions to a temporary location or other location

---

### On Site Sequencing

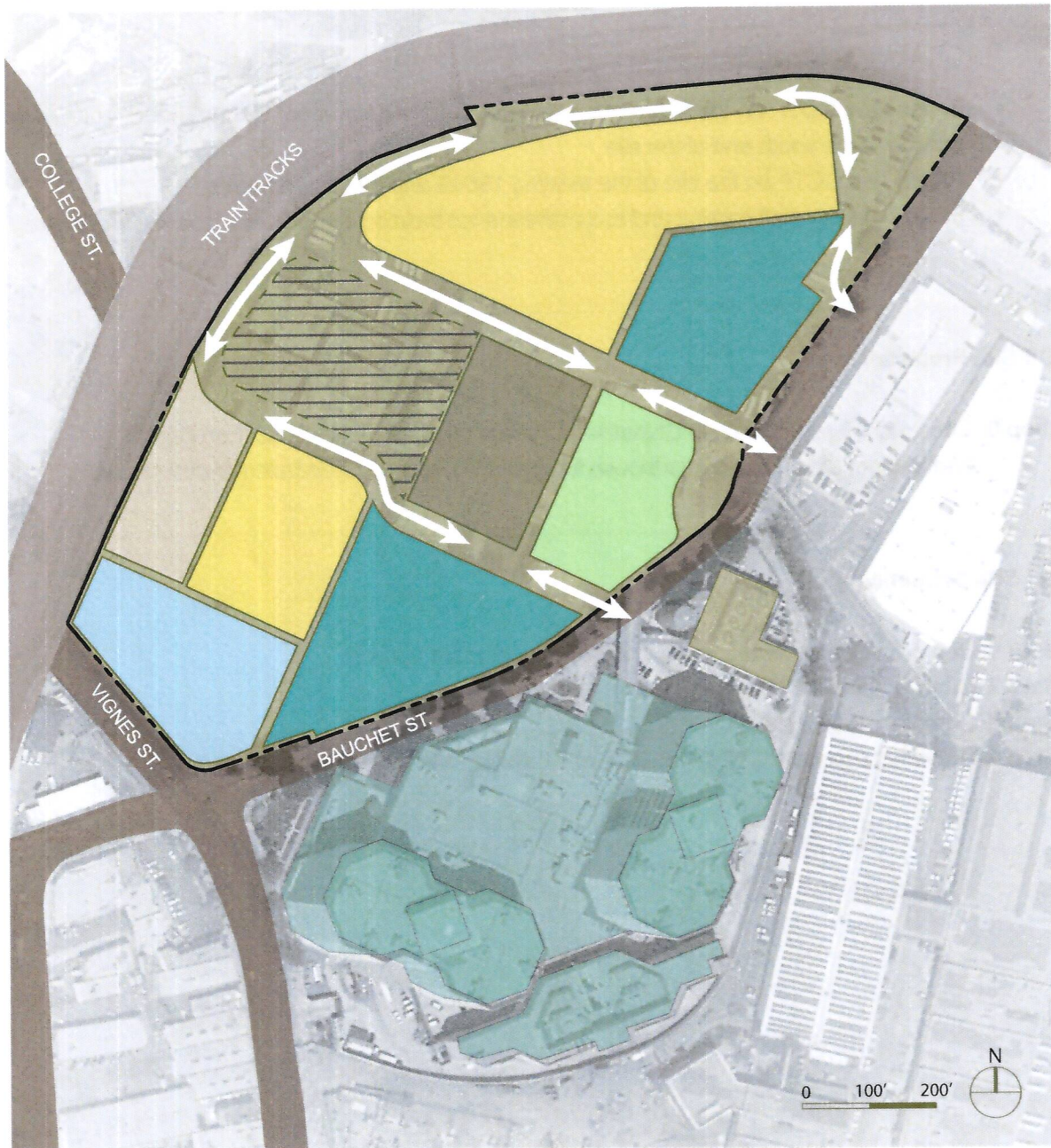
**Step 1.** Demolish Central Arraignment Court and associated parking

**Step 2.** Construct first CCTF tower

**Step 3.** Demolish 1960's jail

**Step 4.** Construct second CCTF tower, loop road, and on-site parking structure

## SITE DIAGRAM - OPTION 1B, NOVEMBER 2014



**LEGEND:**

- EXISTING TWIN TOWERS CORRECTIONAL FACILITY
- EXISTING CENTRAL COOLING PLANT
- NEW TREATMENT FACILITY
- NEW CORRECTIONAL TREATMENT CENTER
- NEW ADMINISTRATION AND SUPPORT
- NEW PARKING WITH/ COURT LINE & BUS QUEUING

- NEW PUBLIC PLAZA
- NEW LOADING / KITCHEN
- UNDEVELOPED
- NEW LOOP ROAD
- NEW TUNNEL CONNECTION
- NEW SECURED SKYWAY

## OPTION 1B, NOVEMBER 2014

---

### Siting

- CCTF built on the north and south of the site concurrently:
    - South:** on the site of the existing Arraignment Court building and public parking.
    - North:** on the site of the existing 4-story parking/bus garage and 1970's jail facility.
  - Parking, Court Line, and undeveloped area on the site of the existing 1960's jail facility.
- 

### Off Site Preparation

**Step 0.** Construct off-site parking in Chinatown to accommodate parking loss from Central Arraignment Court building and 4-story parking/bus garage; move courthouse functions to a temporary or other location; move 1970's jail inmates to temporary off-site housing; move bus maintenance, service yard, bus parking, and Court Line to temporary off-site location.

---

### On Site Sequencing

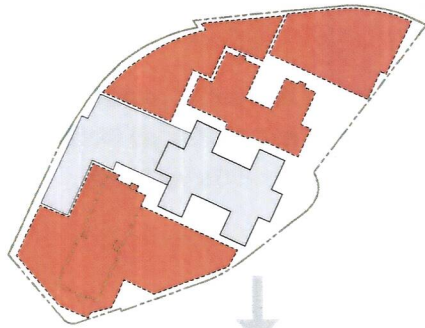
**Step 1.** Demolish Central Arraignment Court building with associated parking, 4-story parking/bus garage, 1970's building, and Court Line.

**Step 2.** Construct Correctional Treatment Facility, north loop road, and support functions on vacated site. Fire department access will be provided during construction.

**Step 3.** Demolish 1960's and 1970's jail facility, Infirmary, and Central Heating Plant.

**Step 4.** Construct parking structure with Court Line below, public plaza, loading / kitchen, and loop road - retaining a portion of the land as undeveloped.

## PROGRESS DIAGRAM - OPTION 1B, NOVEMBER 2014



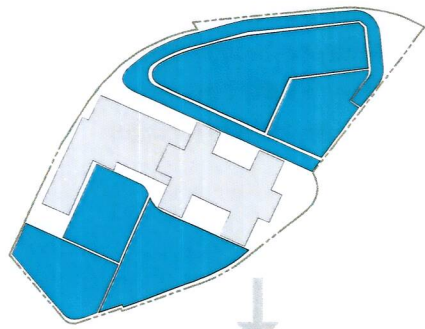
### Step 1 - Start of Demolition

#### Demo

Central Arraignment Court, Court Parking, 70's MCJ, 4-Story parking Structure, Court Line & Bus Maintenance Yard

#### Remain

60's MCJ, Infirmary, & Central Heating Plant



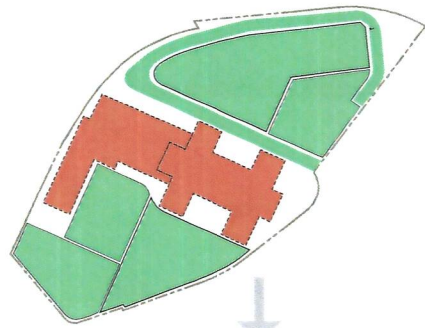
### Step 2 - Construct

#### Construct

Treatment Facility, Correctional Treatment Center, North Loop Road, Admin, & Support

#### Remain

60's MCJ, Infirmary, & Central Heating Plant



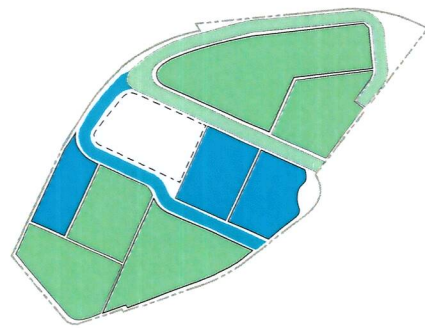
### Step 3 - Demolition

#### Demo

60's MCJ, Infirmary, & Central Heating Plant

#### Built

Treatment Facility, Correctional Treatment Center, North Loop Road, Admin, & Support



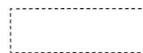
### Step 4 - End of Construction

#### Construct

Parking Structure (Court Line below), Public Plaza, Loading / Kitchen, South Loop Road

#### Built

Treatment Facility, Correctional Treatment Center, North Loop Road, Admin, & Support



Undeveloped

## 9 ANALYSIS

# Schedule & Phasing Consideration

Option 1B, April 2014 had an anticipated construction completion date in 2026. It should be noted that this date has been validated from the ongoing report based on an alignment of procurement and construction start dates. A major driver for the duration of that option was the two phases of construction of the CCTF towers. However, as noted in the implementation description above, there are a number of factors that impact the overall project duration including the following:

1. **Environmental Impact Report (EIR).** A project of this scale will require an EIR which has specified time periods for notifications, public review and comment. The EIR consultant, working with the County, will recommend the best approach and estimated timelines for EIR approval.
2. **Off-site interim solutions.** Some off-site interim solutions may not require the remodel of existing or construction of new facilities if there is an operational solution. Those that do require construction, such as the interim parking structure in Chinatown, will be on a critical path for completion prior to demolition of the on-site use.
3. **Design-Build team selection.** This process includes the development of scoping documents for each of the discreet bid packages, a 2-step Request for Qualifications and Request for Proposal process followed by recommendation to the Board of Supervisors, then contract approval for the selected design-build team.
4. **Design and agency approvals.** While the project process can be expedited by designers and builders teaming together, state and local agencies must approve plans before construction can begin. Depending on the project type, those agencies can include local planning, State Fire Marshal, South Coast Air Quality Management District (SCAQMD), health, and building departments, the California Board of State and Community Corrections (BSCC) for facilities with inmates and the Office of Statewide Health Planning and Development (OSHPD) for the Correctional Treatment Center (OSHPD 4). OSHPD 4 refers to Office of Statewide Health, Planning & Development, General Requirements for Correctional Treatment Centers and Intermediate-Care Facilities. Each agency has special processes and time periods that must be planned for.
5. **On-site demolition and site preparation.** Before construction of new facilities can begin, existing facilities must be vacated, hazardous material abated, demolished, and the sites prepared for the new construction project. The availability of the site to accommodate new construction within the reduced phasing is critical. Similar to new construction, demolition requires team selection/bidding, contracting, and a period for demolition of the buildings.
6. **Construction.** Construction periods are influenced by the size of the project, the type of construction and the ease of construction. Construction periods can be expedited through early design packages (site prep and foundations), longer working hours and days and other strategies.

7. **Commissioning and move-in.** Prior to full operation, furnishings and equipment must be moved in, staff trained and the building fully commissioned to assure smooth, safe, and secure operations.
8. **Logistics.** The timing and intensity of operational affect on an occupied site will require careful sequencing of on-site and off-site activity that determines schedule milestones.

The graphic schedule on the following page shows estimated timing and key milestones for the proposed CCTF project. Precedent milestones and key process completion dates in order to begin the CCTF construction are indicated. For comparison purposes, the steps for Option 1B, April 2014 and Option 1B, November 2014 are presented in separate sections, one above the other.

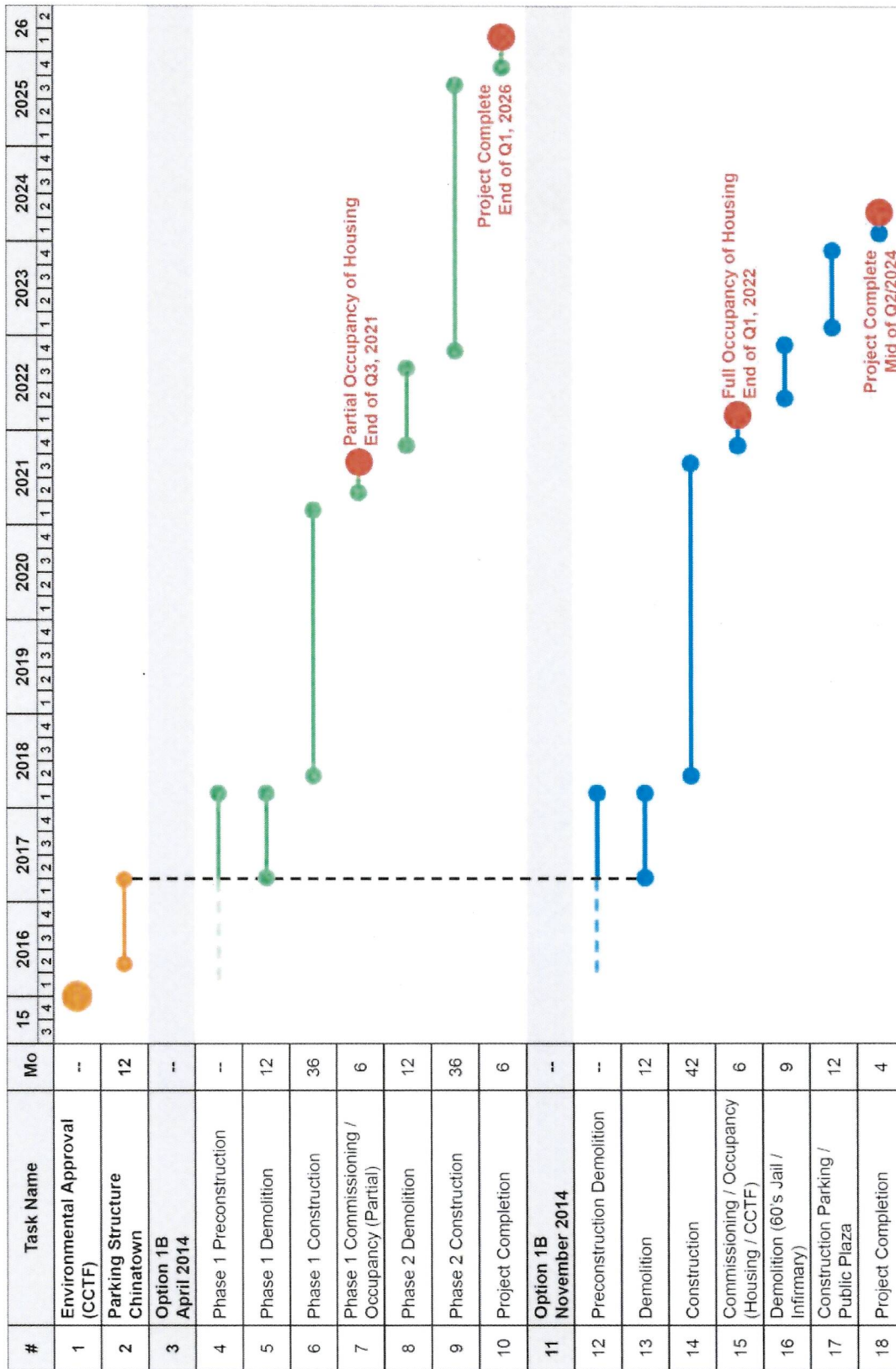
Note that the major CCTF construction start date is the same in both versions: Q2 2018. The construction duration for the CCTF Phase 1 in Option 1B, April 2014 is shown as 36 months (3 years) with a second phase of construction, also 36 months (3 years), and then completing and fully occupied in Q1 2026. The timing and intensity of operational impact on an occupied site will require careful sequencing of on- and off site activity that will impact schedule milestones. The construction duration for the CCTF in Option 1B, November 2014 is shown as 42 months (3-1/2 years) for the majority of the CCTF and occupancy Q1 2022. Total construction completion (parking structure, plaza, and Court Line) is projected to be Q2 2024.

**Basis for estimating CCTF construction duration.** The preliminary estimate of 42 months for construction duration in Option 1B, November 2014 is based on a number of factors. The first factor was a preliminary review of a variety of projects, completed in recent years and close in magnitude to Option 1B, November 2014. While each project has unique conditions and complexities as reflected in the range of projects in the list below, they represent preliminary reference points at this early stage of analysis.

Project	Construction Value	Construction Duration
LAX Midfield Terminal	\$1.2 billion	+/- 42 months
LAC/USC Hospital	\$600 million	+/- 48 months
California Health Care Facility, Stockton	\$600 million	+/- 32 months
NFL Facility in New Jersey	\$1.2 billion	+/- 36 months

The aforementioned project examples range from 32 to 48 months in construction duration. Therefore based on a contemplated approach to construct the north and south components concurrently, a projected +/- 42-month preliminary schedule duration is the currently projected construction period for this phase of the LA CCTF Option 1B, November 2014.

# COMPARATIVE SCHEDULE





# 10 ANALYSIS

## Project & Construction Cost

Using the program information AECOM, together with cost estimating consultant Cumming has validated the Option 1B, April 2014 version based on estimating experience of program requirements.

The Option 1B, April 2014 estimate of \$1.967 billion includes the proposed CCTF on the current site. The off-site parking structure cost is not included but is critical to the program as it is required to be constructed and be operational prior to commencement of any demolition activities on the current site.

The Option 1B, November 2014 evolution proposes the same program for the CCTF, as well as an increased interim off-site parking and increased on-site parking. Escalation is a percentage factor applied to the cost of construction to account for expected increased costs as the project continues. Using historical data and based on acceptable industry wide standards, escalation is factored into the cost of construction over the project duration. The Option 1B, November 2014 cost model has factored the associated escalation in line with the revised schedule.

An area of potential cost savings that may be realized is the reduced General Conditions for the design-builder due to a shortened construction schedule. Option 1B, November 2014 has a total schedule or duration of 42 months compared to the 72 months required for Option 1B, April 2014.

# 11 STRATEGIES GOING FORWARD

## Strategies to Improve Efficiencies

The Site Plan Evaluation team has identified a number of opportunities for efficiency improvements in operational and construction cost. These and other options will be investigated in the next phases of AECOM's Scoping Document development. The following is a preliminary list of strategies:

1. Optimize Sheriff's staff ratios while supporting decentralized programming
  - Investigate the adoption of adopt a 128-bed Treatment Housing Unit configuration (with two 64-bed pods subdividable into 32-bed sub-pods) .
2. Stack similar functions and floor plans
  - Housing and Correctional Treatment Center floors that are stacked vertically improve construction efficiency and ease ongoing operations and maintenance.
  - Aligning like-construction avoiding mechanical, electrical, and plumbing system transfer levels and excessive code requirements for differing usage and construction types.
3. Separate buildings of different occupancy types and code requirements
  - Cluster buildings with different essential service/seismic/approvals processes to minimize code application where not required (e.g. OSHPD 4 Correctional Treatment Center (CTC)).
  - Allows for economical usage of differing building construction to better serve the intended purpose.
4. Limit excavation below existing basement depth (noted in April 2014 report as well)
  - Minimize costly excavation and substructure complexity along with avoiding extensive existing underground utility network.
5. Avoid soft stories
  - Programming to avoid placing the spaces with higher head height requirement under high rise elements helps control the structural design cost by avoiding the need to transfer load on two structural systems within the same building.
6. Use rooftops for outdoor program such as staff break areas, contact visiting, or other functions
  - With a congested site, the rooftops can afford cost effective opportunities for outdoor uses.
  - Rooftops designed for occupant loading can provide future flexibility for outdoor uses.
7. Shorten the schedule
  - With the expected increase in the construction costs for Los Angeles in the coming years, any opportunity to reduce the construction end date should yield cost savings.
  - Schedule reductions should be optimized so as to avoid increasing construction costs.
  - Allows stability in permanent facilities with stable populations sooner and a shorter period of disruption.
8. Increase the parking structure height
  - To minimize built up area and retain as much undeveloped land as possible.
  - Cost effective method within the heights to this project.

9. Optimize horizontal circulation
  - Programming adjacencies to deliver most effective staff connectivity measuring less inmate/patient movement.
10. Expand hours of treatment programs to reduce number of program rooms
  - Programmatic exploration of the impact of working practices and program operating hours on space requirements resulting in optimal efficiency.
11. Provide program space on the housing tier level as well as on the dayroom levels in order to reduce footprint and maximize use of building volume
  - The mezzanine/tier space could be used to provide program space while keeping the overall footprint of the building the same.
12. Design to support security staffing
  - Review the arrangement of secure spaces to help optimize the efficiency of security staff.
13. Decentralization of programming (as also proposed in the April 2014 report)
  - Providing the spaces and activities most often utilized adjacent to and accessible from the housing units. This allows for unescorted inmate/patient movement and places staff directly where they are working.
14. Study locations for medical equipment
  - There may be efficiencies in locating equipment on every floor or at interval floors.
  - Locate equipment only at the central clinic.
15. Review the April 2014 space program to reduce the overall building area
  - Some functions may currently be located at TTCF or other facilities.
  - Some functions may be colocated or shared.

# 12 STRATEGIES GOING FORWARD

## Items to be Addressed and Resolved

The scoping documents team will work closely with the DPW, CEO, Sheriff's Department and other County agencies to strategize and assure that the following items are addressed and resolved before and during construction and when all of the buildings are complete.

1. Staff, professional visitor, and inmate visitor parking
  - Program for temporary and permanent parking needs.
  - Consider both on-site and off-site opportunities.
2. Traffic circulation
  - Consider temporary and long-term permanent traffic circulation and vehicular movements in the program development.
3. Construction parking, access, and laydown areas
  - Recognizing the size and restricted nature of the site, investigate potential areas where construction support activity may be reflected in the general contractor's pricing.
4. Courthouse
  - Program the existing and expected courthouse function into the integrated program for courthouse replacement.
5. Court Line function and location
  - Coordinate with the Sheriff to program the interim Court Line.
6. Bus transport aspects
  - Optimize the bus routing, parking and maintenance space requirements to be determined.
7. Administration/Support Services
  - Optimize the location and adjacencies of the support services and administration spaces relative to treatment functions.
8. Interim inmate housing
  - Coordinate with the County on phasing and timing of any temporary inmate housing requirements to align with proposed project schedule.
9. Central heating plant and cooling plants
  - Operational consideration of collocating with the central cooling plant.
  - Optimizing its siting relative to phasing and design of distribution systems.
  - Re-routing of main utility services on site to accommodate existing to remain facilities.
10. Full Life-Cycle Costing
  - Analyzing the full capital cost and cost of operation and finding the balance across the various approaches and options.
11. Areas of refuge
  - Programming the spatial requirements and associated adjacencies of the building code required areas of refuge.

## 12. Vertical operational relationships

- Validating the programmatic impact of vertical stacking of spaces and its associated capital cost advantage with the operational impact and associated support infrastructure
- Ensure adequate elevator access and quality.

## 13. Program development of CTC with MOSH

- Detailed understanding of the staff efficiency associated with the adjacencies between the CTC and the Clinic, and the Clinic and MOSH, and the potential for shared waste removal and laundry staging.

## 14. Fire and life safety review

- A detailed code analysis of the fire life safety implications of various programmatic adjacencies.

## 15. Sheriff's excluded functions

- A few existing Sheriff's Department functions on the Men's Central Jail Site were excluded in Option 1B, April 2014. Those items are the show-up room, Training Service Bureau and mobile ranges, and Facilities Services Bureau. A plan for whether to include on-site or to address with off-site facilities needs to be determined.

# 13

## STRATEGIES GOING FORWARD

### Emerging Design Criteria

During the Site Plan Evaluation process, testing of the site led to modeling building heights and masses. Since these were just tests rather than building designs, the focus in communicating Option 1B, November 2014 is as a zoning diagram, not representing shape, height, or mass. However, in that process, building development guidelines began to emerge and will be further developed in the next phases of the Scoping Documents. The guidelines are:

1. Respond to urban context and scale (height and bulk)
2. Vertically stack like housing units for efficient construction
3. Separate functions with higher code requirements to minimize construction cost impact
4. Provide efficient vertical and horizontal circulation
5. Align housing with inmate classification/needs
6. Produce outstanding correctional environment that supports therapeutic goals
7. Plan development to consider space, light, views, and recreational areas
8. Respect required adjacencies while also grouping functions with similar space, structural, and accessibility requirements
9. Leverage technology to increase efficiencies.
10. Provide efficient functional layout concepts, taking into account operational cost efficiencies

# 14 STRATEGIES GOING FORWARD

## Next Steps

Concurrent with the development of this Site Plan Evaluation the AECOM team has begun the Survey, Inventory, and Data Analysis associated with the programming and building systems research and analysis. Key upcoming AECOM Scoping Documents task milestones are as follows:

- Program and building systems analysis – December 2014
- Definition and evaluation of building development – February 2015
- Recommended building layout – March 2015
- Design-builder procurement support – May 2015

Los Angeles County Department of Public Works, Chief Executive Office, Sheriff's Department, Department of Mental Health and Department of Public Health are working to facilitate the implementation of the proposed CCTF project. Key County activities are as follows:

- Completion of the environmental process.
- Development of the RFQ and RFP for design-build teams.
- Identifying and/or facilitating the development of interim facilities such as the off-site Chinatown parking structure, inmate housing, Court Line, Central Arraignment Court, bus garage and maintenance facility.
- Infrastructure studies to assess existing conditions.



## PRELIMINARY ENGINEERING ASSESSMENTS

# AECOM Structural Assessment

When considering the structural challenges for a project of this magnitude a variety of conditions must be considered. Things like, foundation methodology, lateral systems, existing conditions, and phasing are evident in any project. This project will also need to account for security restrictions, code limitations for a tall building, and medical facility requirements. Each of these elements will need to be dealt with at all levels of the design process.

- Foundation methodology will be dependent on preliminary geotechnical exploration findings
  - Given the size and weight of the towers, deep foundations seem likely. This will create challenges when protecting utilities, etc.
  - If there are contaminants in the soil, this will affect the desirability of basement spaces and underground techniques that call for soil removal and/or replacement.
  - Water Table information will affect waterproofing recommendations.
- Seismic considerations will have an impact on the structural system used for housing.
  - Precast Cell Units are secure and consistent, but they are heavy and will add additional seismic loading. They will also be difficult to lift to the highest floors. Precast Cells can be used for bearing/shearwalls.
  - CMU or cast in place units will not have the same lift considerations, but they will be constructed more slowly. Some of this concern could be offset by specialized pouring techniques like Tunnel Form construction, where reusable forms are used in the casting process and removed quickly. These are often effective on structures with repetitive plan and vertical elements. Note that these techniques do require that special care be taken when detailing reinforcement for shear walls, especially for high rise structures. Whatever construction sequence methods are used, they will still have a significant contribution to seismic mass. In addition, Tunnel Form type methods will limit the size and shape of many of the spaces and would very much drive Architectural solutions.
  - Steel Cells (concrete fill between steel plates), will go up quickly, will not have the same lift requirements as precast, will add less mass to the system, and will take the least amount of plan space. However, the units themselves tend to be more costly than the other two options. Steel Cells do not provide lateral capacity or bearing capacity (beyond a typical 2 level with mezzanine arrangement).
- Layout space will be a major concern given the phasing and space restrictions.
  - Materials and systems that require space for preparation will have to be carefully considered when investigating the final phasing plans.
- Clear sight lines are obviously imperative in certain areas.
  - Careful column and wall placement will need to balance unobstructed views with efficient framing spans. Columns will be integrated within cell layouts where possible.
  - Avoid curved corridors within the security areas.

- Elevator cores are required in any tower system and are a natural location for shear walls or braced frames.
  - Allowing enough space around these cores may limit (although not eliminate) the need for these systems in other parts of the structure.
- All protuberances or interferences are to be avoided, especially in the detention areas or any corridors that will be used to transport detainees.
  - Concrete walls are often the best choice for these conditions, but given the height of the towers, concrete walls/corridors are much more efficient when they can be aligned all the way to the foundation.
  - Medical or healthcare related functions (i.e. infirmary, mental health etc.) may affect the risk. Hospitals are assigned the highest category (IV) and have many additional criteria that will increase design loads and cost of connections.
  - Typical Detention Facilities are one category lower (III); they would have fewer detail requirements and a smaller force magnification.
- The maximum building height will have an impact on the available lateral systems given the likely Seismic Classification.
  - A “complicated” tower with potential for twisting cannot be taller than 160 feet.
  - A relatively simple tower with redundancy (additional shear walls or braced frames) cannot be taller than 240 feet.
  - Anything taller than 240 feet will require a “dual system” classification where a shear wall and braced frame system are paired to provide additional redundancy.
- Buildings over 160 feet in height should be stamped by a Structural Engineer.
  - S.E. – not P.E. Civil.
- More ductile systems (special braced frames or better) will effectively reduce the lateral load that the building will see. Rigid systems (shear walls) will increase the forces to be resisted, but will provide a stiffer structure overall.
- Dual systems actually provide benefits of both stiffness (from the shearwalls) and ductile action/redundancy in the case of a large seismic event (from the braced frame components).
  - Note that this could potentially include combinations of precast cell walls and other walls with steel braced frame elements.
- Structures with basements that have a substantial change in exterior grade (approximately 6 feet or more) from one end of the building to the other may be subject to additional earthquake induced soil pressures. These pressures can become substantial.
- The smaller towers/structures would have similar options, although there will be more flexibility on materials and lateral systems when the structure height is less than 160 feet above grade.
- Parking Structures are usually constructed in concrete to maintain lower profiles and to allow for easy ramp transitions.
  - It is common for these to use post-tensioned elements (slabs and or beams) to further decrease the profile and mass. The repetition of layout and design between floors makes post tensioned systems a cost effective alternative.
  - Other alternatives are available including cast-in-place concrete and steel framed with concrete decking or planks; however these are far less common.

## PRELIMINARY ENGINEERING ASSESSMENTS

# AECOM MEP Assessment

The CCTF is a large, multi-function site made up of several critical components which require attention and individual solutions. At the same time however, those solutions are interconnected as many of the site processes are related by function, by physical connection, or both. The mechanical, electrical, and plumbing (MEP) utilities and systems must be designed to not only address the intended future site and building functions, but the existing to remain functions as well.

In order to successfully develop the MEP designs, a carefully planned, systematic approach is required to identify all interdependencies of the existing and new facilities. It is necessary to first fully understand the condition, location, routing, and capacity of all existing utility systems and equipment on site. This will provide a basis for developing the new systems design intent. Limiting the amount of modifications and rework necessary for the existing systems is important for not only cost but for limiting disruption of the site function as well. With this being a fully operational detention facility throughout construction, delivering a design which eliminates extended utility interruption is paramount.

Concurrently we will be developing design criteria for the new facilities related to local, state, and national requirements, industry standards, and good practice. Because there are multiple facility types on site, it is important for us to define the conditions and loads for each – including healthcare, detention, and administration. The site assessment identifies what exists, and the design criteria identifies what is needed. Finding the appropriate method in which to provide the new MEP systems is the most critical component, and is based on several key factors.

As mentioned previously, eliminating disruption to the ongoing operations on site is vital. Understanding the facilities which are existing to remain either temporarily or permanently will drive decisions related to utility modifications and relocations. A component of that is minimizing the amount of temporary resolutions which are developed to minimize disruptions, as that can increase the project cost. Therefore being creative in preparing the final solution relative to the construction schedule and phasing is crucial. Considering the operation of the facility post-construction is important as well. These are long life facilities and inefficiencies in system design can have long term financial impacts.

## EXISTING CONDITIONS ASSESSMENT

It is important to understand what exists on site, related to both equipment and utilities which are to be removed and those which are to remain. There are several buildings constructed at various periods throughout the last 50 years, and the existing documentation does not comprehensively identify all of the critical components. In order to gain sufficient knowledge and understanding of the existing systems, a comprehensive review of the site infrastructure will be undertaken.

The following items will be important in determining the viability of existing systems and the required modifications of specific systems to accommodate the intended new program:

- Identification of all site utilities routings, including sanitary, storm, domestic water, fire water, chilled water, heating hot water, steam, natural gas, electrical, communications, fire alarm, and security. These utility routings will include those below grade as well as those routed through buildings to connect to adjacent buildings.
- Determine the points of connections of the utilities to each existing building, including buildings to be demolished.
- Identify the incoming service equipment utilized within each existing building for the connections of the utilities.
- Capacities of the existing chilled water and boiler plants will be important in defining how the equipment is used during construction and how it will be used post construction.
  - Chilled water feeds the entire site from the plant adjacent to Twin Towers. The capacity of the system will dictate how it is used post construction. The new program for the CCTF includes more square footage than the existing CCTF, and will therefore impact the capacity of the chilled water plant.
  - The thermal energy storage (TES) will be similarly impacted as the chilled water.
  - The boiler plant producing steam for heating hot water and domestic water will eventually be demolished. It will be utilized for a period of time during construction for existing loads, which will not affect capacity.
- Capacity of the existing electrical service to the site from Los Angeles Department of Water and Power (LADWP) will be determined. Clarifying that Twin Towers is served separately will aid in determining the necessary capacity increase to accommodate the new program facilities.
- Capacities of the other site utilities will be equally important, including natural gas, storm, sewer, domestic water, and communications.
- Age and condition of the existing equipment to remain will have a bearing on the development of new concepts related to the site utilities, especially related to the chilled water system.
- Identify existing equipment and utilities to be demolished without impact to existing operations.
  - Where there are instances of equipment and utilities which are specific only to the buildings to be demolished during construction, locations will be defined to isolate those systems from those intended to remain in operation.
- Identify existing equipment and utilities to be demolished which impact existing to remain facilities.

- The existing boiler plant will ultimately be demolished, although it will continue operation for “existing to temporarily remain” and “existing to remain” buildings. The equipment will remain in place and in operation until permanent utilities are in place, tested, and commissioned.
- The routing of the steam from the boiler plant will be critical to the continued services to the “existing to remain” buildings. It is understood that the piping from the boiler plant to the Twin Towers crosses the roof of the 1970’s building. This is a building currently planned to be demolished during the initial stages of new CCTF construction. Defining ways in which this piping can remain or be rerouted will determine how the demolition of the 1970’s jail impacts the phasing and cost.
- The Infirmary and 1960’s Jail are fed by the existing boiler plant. These buildings will remain in operation through construction, and accommodations will be made to allow for continued utility services. The routing of the steam piping will be defined in order to determine what modifications are required.
- The Twin Towers will remain in operation throughout construction and after, and are served from the boiler plant for heating hot water and domestic hot water. Similar to the Infirmary and 1960’s jail, options will be developed to insure there is no disruption to service, other than planned construction activities, while the final service equipment and connections will be as efficient as possible.
- Security and communications will be critical to insure the systems remain in place for the temporary to remain buildings, for both internal operations as well as any interconnections to other site buildings.
- Identify existing equipment and utilities to remain.
  - The existing chilled water plant and TES are developed at the plant adjacent to the Twin Towers, a plant which is currently intended to remain post construction. This plant serves both the Twin Towers and Central Jail facilities, and is approximately 25 years old. Several items will be considered in the continued utilization of this plant:
    - Age and condition of the equipment, distribution, and control systems.
    - Routing of distribution beyond Twin Towers and the modifications required to temporarily preserve the existing Central Jail site, ultimately to be demolished. Capacity of the plant relative to the new construction demand loads.
    - Location of the plant relative to the new construction equipment points of connection.
  - The existing electrical service from LADWP for the Central Jail site is located near the boiler plant. Determining how LADWP serves the “existing buildings to remain” and “to be demolished” will influence the design of the new construction distribution to the buildings and service equipment.
  - Similar to the “existing to be demolished” buildings, security and communications cabling will be important to identify and maintain for “existing to remain” buildings. Where there are critical systems annunciation and reporting systems on the Central Jail site that affect Twin Towers, accommodations will be required to insure no disruptions.

